

REMARKS

Claims 1-11 are pending in this application. Claims 1, 2, 3, 9, 10, and 11 are under consideration. Claims 4-8 are withdrawn. Claims 1, 2, and 3 are amended herein. Claims 9, 10, and 11 are added herein. Claims 9, 10, and 11 read on the elected embodiment. Support for the amendments to the claims, and for the new claims, may be found in the claims as originally filed and at page 2, lines 20, 30, 31, 33, and 34, page 3, lines 23-26, and at page 4, lines 9 and 10 of the specification. Reconsideration is requested based on the foregoing amendment and the following remarks.

Objections to the Drawings:

The drawings were objected to for not showing a "raised outlet" on each vacuum opening. New Fig. 3 shows the raised outlet of vacuum opening 5 in a cross-section through the frame 2. Support for a new Fig. 3 may be found in Figs. 1 and 2 as filed originally, and at page 3, lines 23-28 of the specification as filed originally. No new matter has been added. Withdrawal of the objections to the drawings is earnestly solicited.

Objections to the Specification:

The Specification has been objected to for various informalities. Appropriate corrections were made. Withdrawal of the objection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 103:

Claims 1-3 and were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,765,889 to Nam *et al.* (hereinafter "Nam") in view of U.S. Patent No. 6,068,316 to Kim *et al.* (hereinafter "Kim"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

Claim 1 recites:

A film provided for bearing a wafer is stretched onto said frame.

Neither Nam nor Kim teach, disclose, or suggest "a film provided for bearing a wafer is stretched onto said frame," as recited in claim 1. Neither Nam nor Kim, in fact, mentions a film at all. In Nam, rather, the wafer is supported horizontally by vacuum-absorption in association with the vacuum-absorbing projections. In particular, as described at column 2, lines 14-21:

The supporting means comprises a plurality of pins which are formed on the fingers and on the body. Moreover, a supporting projection may be provided at a

connection point where the branch vacuum lines are branched from the main vacuum line and which has an opening in communication with the main vacuum line, so as to horizontally support the wafer by vacuum-absorption in association with the vacuum-absorbing projections.

Since, in Nam, the wafer is supported horizontally by vacuum-absorption in association with the vacuum-absorbing projections, Nam has no "film provided for bearing a wafer is stretched onto said frame," as recited in claim 1.

In Nam, moreover, a plurality of pins 20 support a wafer horizontally thereon while the arm holds the wafer by vacuum-absorption. In particular, as described at column 2, lines 49-54:

FIG. 2A shows a novel wafer transfer robot arm in accordance with an embodiment of present invention, which includes a body 11, two fingers 12 extending in parallel from respective ends of the body 11, and a plurality of pins 20 for horizontally supporting a wafer thereon while the arm holds the wafer by vacuum-absorption.

Since, in Nam, a plurality of pins 20 support a wafer horizontally thereon while the arm holds the wafer by vacuum-absorption, Nam has no "film provided for bearing a wafer is stretched onto said frame," as recited in claim 1.

In Nam, moreover, three horizontal supporting pins 20 are provided to horizontally support a wafer on the arm while the wafer is held by vacuum-absorption at the vacuum-absorbing projections 14 on the fingers 12. In particular, as described at column 2, lines 66 and 67, continuing at column 3, lines 1-7:

In this embodiment, three horizontal supporting pins 20 are provided to horizontally support a wafer on the arm while the wafer is held by vacuum-absorption at the vacuum-absorbing projections 14 on the fingers 12. One pin is formed on the body 11, and the remaining pins are formed on the two fingers 12, respectively. The pins on the fingers 12 are spaced apart from the vacuum-absorbing projections 14, respectively. The height of each pin 20 is equal to or less than that of each vacuum-absorbing projections 14.

Since, in Nam, three horizontal supporting pins 20 are provided to horizontally support a wafer on the arm while the wafer is held by vacuum-absorption at the vacuum-absorbing projections 14 on the fingers 12, Nam has no "film provided for bearing a wafer is stretched onto said frame," as recited in claim 1.

In Kim, for its part, a tweezer of a wafer holder endures the load of the wafer. In particular, as described at column 2, lines 9-16:

Accordingly, in order to overcome one or more of the problems associated with the conventional art, it is an object of the present invention is to provide a large diameter wafer conveying system which can hold a wafer more stably, such that a

tweezer of a wafer holder endures the load of the wafer in a sufficiently dispersed manner so as to prevent the wafer from being scratched, or generating contaminating particles, or being broken.

Since, in Kim, a tweezer of a wafer holder endures the load of the wafer, Kim has no "film provided for bearing a wafer is stretched onto said frame," as recited in claim 1.

In Kim, moreover, the wafer holder 10 comprises a plurality of tweezers 12, each of which can hold a wafer. In particular, as described at column 3, lines 64-67, continuing at column 4, lines 1-4:

Also, as shown in FIGS. 4 through 7, the wafer holder 10 comprises a plurality of tweezers 12, each of which can hold a wafer, and a tweezer block 14 for fixing the plurality of tweezers 12. The plurality of tweezers 12 are provided with a plurality of contacting portions 12a which are spaced from each other by a certain horizontal distance, with the contacting portions 12a defining a fork-shaped configuration (see FIG. 6).

Since, in Kim, the wafer holder 10 comprises a plurality of tweezers 12, each of which can hold a wafer, Kim has no "film provided for bearing a wafer is stretched onto said frame," as recited in claim 1. Thus, even if Nam and Kim were combined, claim 1 would not result. Claim 1 is submitted to be allowable. Withdrawal of the rejection of claim 1 is earnestly solicited.

Claims 2 and 3 depend from claim 1 and add additional distinguishing elements. Claims 2 and 3 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2 and 3 is earnestly solicited.

New claims 9, 10, and 11:

Claims 9, 10, and 11 depend from claim 1 and add further distinguishing elements.

Claims 9, 10, 11 are thus believed to be allowable.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all of claims 1, 2, 3, 9, 10, and 11 are allowable over the cited references. Allowance of all claims 1, 2, 3, 9, 10, and 11 and of this entire application is therefore respectfully requested.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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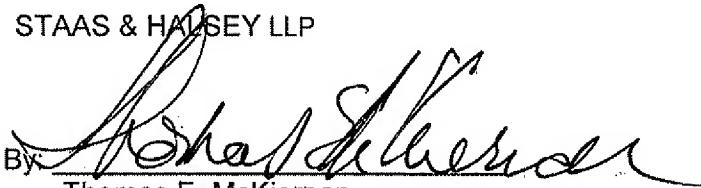
Respectfully submitted,

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Attachment: New Fig. 3